



The River Mile YSI Water Meter Handling Procedures

Meter Supervision

Meter usage must be under the supervision of a responsible adult. The adult does not need to operate the meter, but must ensure that at no time is it misused or handled inappropriately. Remember that the school and the requesting teacher are responsible for the equipment and its replacement if it is damaged.

A training/agreement for safe handling form is included with these instructions for you to use with both adults and students. You may choose to use these to ensure that everyone understands the importance of how to properly take care of the YSI 556 water meter.

Handling

The supervising adult needs to ensure that at no time is the meter handled roughly. It is a computer. Do not drop the meter, immerse in water, shake, or expose to the elements (rain, heat, blowing dust, etc.). Just be sure to keep it safe.

Discuss with students how to handle the equipment. Ensure that all students who will be using the meter understand the directions for use and the responsibility they have for ensuring the meter and associated equipment are handled in a safe and professional manner.

Cleaning

Care must be taken to keep the meter clean and free of dirt and debris at all times. Be sure to clean off all surfaces prior to placing back in the case. This may need to be done after each use. Under no circumstances should you return the meter, probe or cord to the case without cleaning.

Do not use any solvents or cleaning products on the equipment. Use a soft cloth and water to clean surfaces. Use distilled water on the probe and make sure that it does not dry out. Replace distilled water in the probe cover if it is lost while changing out for use.

Be sure that the meter, probe, cord, case, supplies and other items in the case are clean and ready for use by the next team or school.

It is your responsibility to clean the equipment and ensure that it is ready for use.

Packing

Be sure to carefully pack all items in the case. Ensure that each item is properly stowed and within its compartment. Make sure that the cord is rolled in such a manner that it fits within the case and does not "spill" over onto the packing foam.

Calibration

You must ensure that your meter is calibrated and ready for your use. Please refer to calibration instructions.

Taking Readings

- 1) Install Probe on the meter. Plug cord in like a computer, matching prongs with holes.
- 2) Attach the probe to a pole if not wadding (recommended during drawdown periods) and allow to hang far enough for the probe to swing freely.
- 3) Remove Probe's clear plastic cover and ensure the liquid in the cover is not spilled. There must be liquid in this cover at all times (a small amount, not completely full). If this liquid is accidentally spilled or discarded, you may replace with 1/8" of water.
- 4) Attach the sampling cover on the probe. **Do not touch any sensors!**
- 5) Screw on hand-tight.
- 6) Take the YSI meter probe attached to the pole and carefully reach over water at arm's reach.
- 7) Lower the pole and probe until the probe cable is at **least 6" below the surface but not more than 12"**. These should be marked on the cable.
- 8) Be sure the probe does not touch the bottom or any rocks and the water around it is clean and free of debris. **If needed, sampling depth can be altered.** Note this on your data collection sheet, but try to take all samples at the same depth.
- 9) Be sure to completely immerse all the sensors.
 - 1) Rapidly move the probe module through the water side to side to provide fresh sample to the sensor. But don't stir up dirt and debris.
 - 2) Press the On /Off key.
OR select Run from the main menu to display the run screen.
 - 3) Watch the readings on the display until they are stable, then read results to recorder.
 - 4) The readings on the screen are: Temperature (°C), Conductivity ($\mu\text{S}/\text{cm}$), Dissolved Oxygen saturation percentage (DO%), Dissolved Oxygen milligrams per liter (DO mg/L) and pH (pH).
 - 5) Return probe to shore and cover. **Do not allow probe to touch the ground or dry out.**

The YSI 556 meter has the capability of logging the data you collect. To learn how to do this you will need to refer to the user manual available from the park.